

REMARKS

Presently claims 1-5, 7-8, and 10-12 are pending in this application. Claims 1 and 10 have been amended. Applicant will now respectfully address the Examiner's rejections.

Rejections under 35 U.S.C. 101

Claim 1 is rejected for allegedly reciting non-statutory subject matter. The Examiner points out Applicant's previous assertion that the stapes is positively recited in claim 1. Applicant now retracts that assertion, and points to the claim language, which merely states that the sound receiver of Applicant's claim is configured in such a manner that it permanently interrupts connection between the incus and stapes.

Rejections under 35 U.S.C. 112, first paragraph

Claim 1 is rejected because the specification allegedly does not provide enablement for permanently disconnecting an incus and stapes. In response, Applicant respectfully points out that it is well known in the art that disconnection of the ossicular chain does not naturally heal or reconnect. Accordingly, Applicant respectfully submits that permanent disconnection of the incus and stapes as shown in Figure 2 of Applicant's Drawings is inherently and necessarily permanent.

Rejections under 35 U.S.C. 102(b)/103(a)

Claims 1-4, 8, and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,624,376 to Ball ("Ball" hereinafter) or being obvious over Ball in view of United States Patent No. 6,540,662 to Kroll ("Kroll" hereinafter) or United States Patent No. 6,585,637 to Brillhart ("Brillhart" hereinafter). Applicant respectfully traverses.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal*

Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Furthermore, for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Applicant's amended claim 1 recites *inter alia*,

“the sound receiver being rigidly fixed to malleus or incus in a manner that permanently interrupts the ossicular chain such that the incus and stapes, or any replacement thereof, are permanently disconnected and the incus is allowed move independently from the stapes or any replacement thereof.”

Applicant first asserts that Ball does not teach a sound receiver being rigidly fixed to malleus or incus in a manner that permanently interrupts the ossicular chain *such that the incus and stapes, or any replacement thereof, are permanently disconnected and the incus is allowed move independently from the stapes or any replacement thereof*. Instead, referring to Figures 8 and 9, Ball teaches an ossicular chain that is uninterrupted between the tympanic membrane CC and oval window EE at least in part due to the incus being fixed to a replacement stapes. Thus, the incus is not permanently disconnected to the stapes *or any replacement thereof*, as is required by Applicant's claim 1. In addition, as the replacement stapes is connected at both of its ends, this replacement cannot move independently of the incus, as is also required by Applicant's claim 1.

Referring now to any combination between Ball and Kroll or Brillhart, Applicant notes that any break in the ossicular chain in Ball would render Ball inoperable for its intended purpose of allowing a user to hear. At col. 6, lines 7-9 of Ball it is taught that, “the mechanical vibrations of the floating mass are transformed into a vibration of the vibratory structure allowing the patient to hear.” Hearing via such vibration requires an intact ossicular chain. Accordingly, if one were to modify Ball by disconnecting the incus from the stapes, which would be the result of the Examiner’s proposed combination of Ball with either Kroll or Brillhart sound/vibration from the floating mass magnet 100 of Ball to the oval windows EE would be interrupted and the hearing ability of the patient would not be improved but completely disabled.

Applicant respectfully notes that, according to MPEP 2143.01 V, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. As permanent disruption of the ossicular chain would render Ball unsatisfactory for its intended purpose of allowing a patient to hear, the Examiner’s proposed combination of Ball with either Kroll or Brillhart is respectfully improper.

As Ball does not teach every element of claim 1 and claims 2-4, 8, and 10-11 that depend therefrom, and one of ordinary skill at the time of Applicant’s invention would not have a motivation to modify or combine Ball with either Kroll or Brillhart, Applicant respectfully submits that *prima facie* obviousness does not exist with regards to claims 1-4, 8, and 10-11.

In addition to the above, Applicant respectfully points out that Ball does not teach a “sound receiver” as is recited in Applicant’s claims. In the Office Action, with reference to the Title, Abstract, Figs 3-5, and transducer 100, the Examiner asserts that Ball discloses a sound receiver from an implantable hearing aid comprising an implantable electro mechanic transducer that converts the force resulting of an accelerated mass into electric signals. Applicant respectfully traverses this assertion.

Applicant respectfully notes that Ball alternately uses the term “transducer” to define two types of transducers used in hearing systems. Ball defines the word transducer in col. 5, lines 63-65 as "a device that converts energy or information of one physical quantity into another physical quantity." This definition covers both types of transducers used in hearing systems, namely those that "transmit vibrations to a vibratory structure of the ear" (col. 5, lines 61-63) and those that "convert sound waves into electrical impulses" (col. 5, lines 65-67). Whenever Ball refers to a transducer of the second kind, i.e. a microphone type transducer, Ball explicitly further describes this transducer as "external sound transducer" (col. 16, line 1 and Col 11, line 7); "microphone 802" (col. 18, line 2); "transducer 950 is the equivalent to a microphone" (col. 19, lines 5, 6). In contrast thereto the transducer of the first kind, i.e. an actuator type transducer, is referred to in col. 5, lines 60-62 as "The present invention provides an improved transducer that may be implanted or mounted externally to transmit vibrations to a vibratory structure of the ear" (underlining added - this very general statement reads only on actuator type transducers) and is named in the following simply as "transducer" without any addition or explanation, see e.g. col. 11, lines 5, 6; col. 15, line 61; col. 16, lines 37, 38; col. 17, lines 37, 38 and so forth.

More importantly, Ball uses reference number **100** for this first kind of transducer only; see figures 5b, 8-10, 18, 19a, 21a, 22 and 23. Applicant respectfully submits that this teaches the transducer 100, as shown in Fig. 9, to not be a microphone type transducer, but an actuator type transducer. Ball does not reach that in Fig. 9 the transducer shown could even be in the form of a microphone type transducer, as Fig. 9 is restricted to, and only describes, an actuator type transducer. Accordingly, modifying the actuator type transducer into a microphone/receiver type transducer as claimed by Applicant would be improper.

Still further, with specific note to amended claim 10, Applicant respectfully asserts that the recitation “configured for a cochlea implant” is a positive limitation. As the receivers 102 (Fig. 3), 132 (Fig. 4), M of 152 (Fig. 5), 172 (Fig. 6), and 28 (Figs. 10, 14, 23) of Ball are obviously not configured for being implanted in a cochlea, Ball does not teach receivers as recited in Applicant’s claim 10. When reading Ball a man of the art

receives information about cochlea implantable and non-implantable devices. As neither Kroll nor Brillhart remedy this deficiency, *prima facie* obviousness further does not exist with regards to claims 10 in view any proposed combination of Ball with either Kroll or Brillhart

Rejections under 35 U.S.C. 103(a)

Claim 5 is rejected under 35 U.S.C. 103(a) as being obvious over Ball in view of Kroll or Brillhart and United States Publication No. 2002/0138115 to Baumann ("Baumann" hereinafter). Applicant respectfully traverses.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

As claim 5 depends from claim 1, for at least the reasons discussed in the 102 remarks above, Ball does not teach every element of claim 5. Since Baumann does not remedy the above discussed deficiencies of Ball, the proposed combination of Ball Kroll or Brillhart and Baumann fails to teach or suggest all of the limitations of claim 5. As the proposed combination of Ball Kroll or Brillhart and Baumann does not teach every element of claim 5, clearly, one of ordinary skill at the time of Applicant's invention would not have a motivation to modify or combine Ball Kroll or Brillhart and Baumann, or a reasonable likelihood of success in forming the claimed invention by modifying or combining Ball Kroll or Brillhart and Baumann. For at least these reasons, Applicant respectfully submits that *prima facie* obviousness does not exist with regards to claim 5.

Claims 7 and 12 are also rejected under 35 U.S.C. 103(a) as being obvious over Ball in view of Kroll or Brillhart, United States Patent No. 5,531,787 to Lesinski et al.

("Lesinski" hereinafter), and United States Patent No. 6,398,717 to Leysieffer et al. ("Leysieffer" hereinafter). Applicant respectfully traverses.

As claims 7 and 12 depends from claim 1, for at least the reasons discussed in the 102 remarks above, Ball does not teach every element of claims 7 and 12. Since neither Lesinski nor Leysieffer remedy the above discussed deficiencies of Ball, the proposed combination of Ball, Kroll or Brillhart, Lesinski, and Leysieffer fails to teach or suggest all of the limitations of claims 7 and 12. As the proposed combination of Ball, Kroll or Brillhart, Lesinski, and Leysieffer does not teach every element of claims 7 and 12, clearly, one of ordinary skill at the time of Applicant's invention would not have a motivation to modify or combine Ball, Kroll or Brillhart, Lesinski, and Leysieffer, or a reasonable likelihood of success in forming the claimed invention by modifying or combining Ball, Kroll or Brillhart, Lesinski, and Leysieffer. For at least these reasons, Applicant respectfully submits that *prima facie* obviousness does not exist with regards to claims 7 and 12.

Conclusion


The rejections herein overcome. Entry of the present Response with Amendment and prompt issuance of a Notice of Allowance are respectfully requested.

Applicant hereby petitions for any necessary extension of time required for consideration of this Response.

Please charge any fees due with respect to this Response, or otherwise regarding the application, to Deposit Account 06-1130 maintained by Applicant's attorneys.

The Office is invited to contact Applicants' attorneys at the below-listed telephone number regarding this Response or otherwise concerning the present application.

Respectfully submitted,

By: 
Daniel R. Gibson
Registration No. 56,539
CANTOR COLBURN LLP
20 Church Street
22nd Floor
Hartford, CT 06103
Telephone: 860-286-2929
Facsimile: 860-286-0115
Customer No. 23413

Date: April 7, 2008